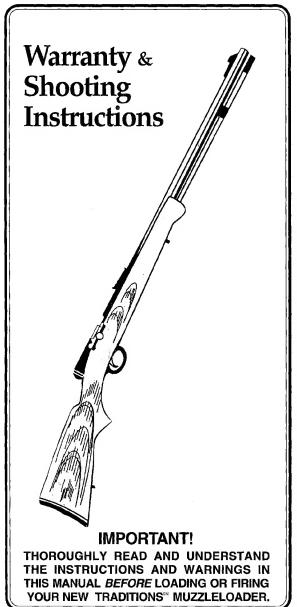
TRADITIONS In-Line Rifles



TRADITIONS inc.

P.O. BOX 776 1375 BOSTON POST RD OLD SAYBROOK, CT 06475

FIT - 10

Introduction

 This manual contains instructions, cautions and dangers for the safe use of muzzleloading firearms. They should be followed completely.

When properly handled, a muzzleloading firearm is safe and enjoyable to use, if you follow a few basic rules.

There is no way to build a muzzleloading firearm so as to absolve the user of the need to use good judgment. Do not abuse your rifle.

 Your rifle should always be treated with the respect due any firearm; in addition to specific cautions and dangers in this manual.

NOTE: If, after reading the instructions, cautions and dangers contained in this manual, you are unwilling to accept the responsibilities involved in shooting a black powder firearm, return the rifle to your dealer before firing; or write directly to Traditions inc., P.O. Box 235, Deep River, CT 06417.

CAUTION: If you sell, trade or give this rifle to another person, be sure to give the new owner a copy of this manual. Copies are available free of charge from Traditions inc.

The Muzzleloading Sport

More and more sportsmen have discovered the challenges and enjoyment of muzzleloading in recent years. For both hunting and target shooting, muzzleloading guns are helping a modern generation recapture and enjoy an important aspect of our nation's sporting past.

Traditions[™] In-Line Rifles are muzzleloading firearms which represent the latest developments in this unique part of the shooting sports. They are manufactured to modern standards for safe and enjoyable shooting. They can be quite dangerous,

however, if proper procedures are not followed.

This booklet is intended as a basic guide for the proper maintenance, loading and shooting of Traditions[™] In-Line Rifles, and to offer important rules and precautions for safe handling and shooting of this type of firearm. In addition to this booklet, it is recommended that the novice obtain further information and instruction before firing a muzzleloader. Sources for this help include:

 Your town clerk, state DEP or conservation department can provide information on hunter safety courses offered in your area. Many such courses include muzzleloading training and are excellent for the beginning shooter.

Contact your local muzzleloading club. Club members will be pleased to help introduce you to enjoyable shooting. A list of clubs in your area may be obtained from:

> National Muzzle Loading Rifle Association P.O. Box 67 Friendship, Indiana 47021

The following books are available from the National Muzzle Loading Rifle Association:

"The Muzzleloading Rifle Handbook"
"The Muzzleloading Pistol Handbook"

Muzzleloading 'Musts'

- Read and understand all instructions and warranty limitations contained in this booklet before loading or shooting your muzzleloader.
- 2. Treat any firearm as if loaded.
- 3. Always wear eye and ear protection when loading or firing.
- 4. Be sure of your target and what is behind it before firing. Do not point your gun at anything you do not intend to shoot and be sure that by standers are behind you.
- Use only the proper grade of black powder or Pyrodex³ in properly measured amounts. See the chart in this booklet for recommended loads.
- Never smoke or permit others to smoke in the presence of black powder or Pyrodex®. Avoid drugs and alcoholic beverages before and during shooting.
- Be certain that powder, patches and projectiles are loaded in their proper sequence and that they are firmly seated on top of one another.
- 8. Use *only* cotton or linen shooting patches when loading round lead balls. *Do not* use any type of plastic patches.
- Never load your gun directly from a can, powder horn or flask. Use a separate measuring device. Any remaining spark or ember in the barrel may cause accidental ignition of the powder being loaded.
- No projectiles other than those specifically recommended in this manual should be used in your muzzleloader.
- Do not rely on the rifle's safety notch. A drop or hard blow could cause the bolt to move forward and the gun to fire.
- 12. Never place a cap on the nipple of a percussion gun until you are ready to fire. Any bump or accidental pressure on the bolt or trigger may result in discharge of the firearm and a dangerous accident.
- Never climb, jump or move abruptly while carrying any loaded firearm.
- Never transport or store a loaded gun. Always store the powder, gun and percussion caps in separate places.
- 15. In the event of a misfire, assume the gun could fire at any moment. Keep gun pointed down range. Wait at least one minute before recapping.

Your New Rifle

Your new Traditions™ In-Line Rifle has been designed and engineered to offer optimum accuracy and performance. Safe gun handling, loading and shooting, however, require that you understand the design and function of your firearm.

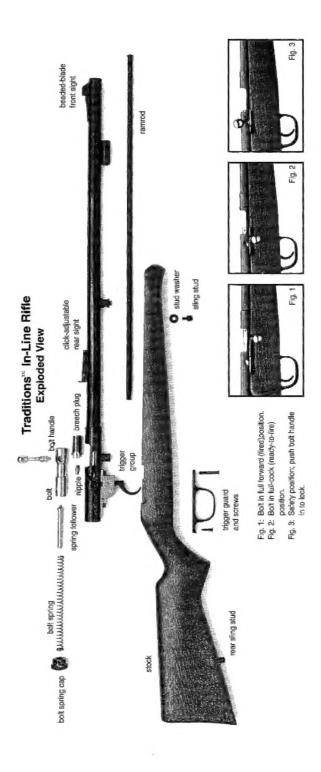
Please take the time now to acquaint yourself with your new Traditions™ In-Line Rifle. If you have questions regarding your rifle after reviewing this information, please call or write the Traditions inc. Customer Service Department for assistance.

Maintenance Procedures:

Proper maintenance and cleaning of your new rifle will require you to periodically disassemble the rifle. Take time before such cleaning to study the following disassembly/reassembly procedures and the accompanying photographs to thoroughly acquaint yourself with your rifle's subassemblies.

Disassembly:

 Before proceeding with disassembly and maintenance of your rifle, make certain the gun is unloaded and that the percussion cap has been removed from the nipple.



- Place bolt in full forward position by holding moderate pressure on the bolt handle, then pulling the trigger and gently sliding the bolt to its full forward position.
- Remove ramrod (if removing barreled action from stock, see below).
- 4. If barreled action is to be removed from stock (unnecessary for most field cleaning and maintenance), follow steps 5, 6 and 7, below. *Note:* Removal of barreled action from stock may alter the rifle's point of impact and necessitate resighting to zero.
- Remove forearm sling stud by gently turning in a counterclockwise direction.
- 6. Remove front screw of trigger guard
- Carefully lift barreled action up and away from stock.
- Unscrew knurled cap at back end of receiver, maintaining a constant pressure on cap to prevent accidental release of bolt spring.

CAUTION: The bolt spring is under compression even with bolt in full forward position and can cause serious injury if released unexpectedly. Exercise caution whenever removing or replacing spring cap and spring.

- Remove bolt spring and spring follower.
- 10. Slide bolt back to rearmost detent. It may be necessary to hold a slight pressure on the trigger to properly align the bolt in this position.
- Remove bolt handle by pulling straight out from side of receiver.
- Apply slight pressure to trigger and allow bolt to slide out from rear of receiver.
- 13. Insert the small end of In-Line Rifle take-down tool into receiver while applying slight pressure to trigger and seat tool securely on nipple. Remove nipple by turning tool in counter-clockwise direction.
- 14. Insert large end of In-Line Rifle tool into receiver while applying slight pressure to trigger and remove breech plug by turning tool in counter-clockwise direction. Be careful not to damage breech plug threads during removal.
- 15. You are now ready to thoroughly clean interior of barrel. To protect against possible damage to the muzzle crown and rifling, which could adversely affect accuracy, insert ramrod with cleaning accessories into the bore through receiver and breech.

Cleaning and Maintenance:

Both black powder and Pyrodex® are highly corrosive and leave considerable residue in a gun's barrel. That residue can easily and quickly cause oxidation, rust and pitting of the barrel interior. For shooting accuracy and protection, therefore, your gun must be cleaned frequently by using simple methods.

Petroleum-based lubricants and solvents greatly increase the fouling caused by both black powder and Pyrodex®. We strongly recommend the exclusive use of non-petroleum-based cleaning and maintenance materials, such as the Traditions™ WonderLube™ 1000 Plus system of products to 'season' your rifle's metal surfaces and reduce cleaning and maintenance requirements. The WonderLube™ family of products includes a

full range of lubricants, pre-lubed shooting patches and bore cleaning solvents.

If you choose not to use the Traditions™ WonderLube™ 1000 Plus system, you will need to clean your rifle after every few shots or when you notice difficulty in loading a projectile. Place a cleaning patch dampened with black powder cleaning solvent on the large end of your ramrod and run it vigorously through the barrel several times to remove the fouling. Follow up with a dry patch or two to remove any moisture.

After shooting, thoroughly clean your entire rifle to keep it in top performance. With your take-down tool, remove the breech plug (see Disassembly and Reassembly sections of this manual). Degrease with WonderLube[™] 1000 Plus Bore Cleaning Solvent (or wash with hot, soapy water, dry and lubricate with a non-petroleum gun oil). Note that use of any petroleum-based cleaning products or lubricants will eradicate the 'seasoning' qualities already imparted to the barrel and metal surfaces by WonderLube[™] 1000 Plus products.

After cleaning, thoroughly dry internal and exterior metal surfaces and apply a light coating of WonderLube™ 1000 Plus or other high-quality, non-petroleum-based rust preventive and reassemble. Store your rifle in a cool, dry area. Storage in a gun case is discouraged, as it may hasten condensation and corrosion.

Reassembly:

- Insert breech plug into the breech opening of the receiver and, using finger pressure only, engage the threads in the breech end of the barrel. When you are satisfied that the breech plug threads have been properly started, use the large end of the In-Line Rifle take-down tool to tighten fully.
- Replace nipple in breech plug using small end of In-Line Rifle take-down tool. Tighten securely.
- Return bolt to receiver and align bolt handle hole with rearmost detent opening in receiver. It may be necessary to apply slight pressure to the trigger to insert bolt.
- Replace bolt handle.
- 5. Insert bolt spring and spring follower into rear of bolt.
- 6. Slide bolt with bolt handle installed to full forward position.
- Place knurled receiver end cap over bolt spring and, applying constant pressure, screw cap fully into receiver.

CAUTION: The bolt spring is under compression even with bolt in full forward position and can cause serious injury if released unexpectedly. Exercise caution whenever removing or replacing spring cap and spring.

- 8. If barreled action was removed from stock, carefully place reassembled barreled action into stock, making sure that trigger sits properly in the trigger opening of stock and trigger guard. Note: Removal of barreled action from stock may alter the rifle's point of impact and necessitate resighting to zero.
- Replace forearm sling stud and front trigger guard screw to securely attach barreled action to stock.
- Replace ramrod.
- 11. The rifle is now ready to load and fire.

Loading Instructions

For reasons of safety and proper performance, these loading instructions for your Traditions™ In-Line Rifle must be followed closely. While some of the procedures may seem cumbersome,

with practice they will soon become second nature and will make for safe, dependable and accurate shooting. (It is very helpful to have an experienced black powder shooter with you the first few times you load and shoot your new gun.) If, after reading these instruction, you still have questions concerning the safe use of your In-Line Rifle, write or call our Customer Service Department.

Follow these instructions in their sequence:

Propellants:

- Black powder or Pyrodex® are the only safe propellants to use in this muzzleloading rifle.
- The term 'black powder' does not refer to any powder black in color, since modern smokeless powders are also black in color.
- Be certain that the propellant you select is commercially manufactured black powder (or Pyrodex®) for use in muzzleloaders.

DANGER: The use of smokeless powder in a muzzleloading rifle will result in excessively high pressures and can cause serious damage to the rifle and possible injury to the shooter and bystanders.

- Pyrodex[®] is intended to be used on a volume-to-volume basis. It burns cleaner and produces less fouling buildup than black powder.
- Different propellant granulations are recommended for use with certain types of muzzleloading firearms. They are as follows:
 - Cannons or very large-caliber rifles: 1f/fg (coarsest granulation) black powder or Pyrodex® CTG. This grade of powder is not recommended for use in Traditions™ In-Line Rifles.
 - .45 to .58 caliber rifles: 2f/ffg (course granulation) black powder, Pyrodex® RS or Pyrodex® Select. This grade of powder is recommended for Traditions™ In-Line Rifles.
 - Revolvers, pistols and .38 caliber (and under) rifles: 3f/ fffg (standard granulation) black powder or Pyrodex⁸ P. This powder grade is not recommended for Traditions¹⁰ In-Line Rifles.
 - Flintlock primer: 4f/ffffg (finest granulation) black powder. This grade of powder is not recommended for Traditions™ In-Line Rifles.
- Store all propellants according to the manufacturer's instructions listed on each container. Local fire regulations should also be followed.

CAUTION: Never smoke while loading, shooting or handling propellants. Always follow the manufacturer's safety precautions as listed on the propellant container.

Loading The Propellant:

- 1. Wear eye and ear protection.
- Check nipple to see that it is secure. If necessary, tighten the nipple with a properly sized nipple wrench.
- 3. Make certain the gun is unloaded:
 - Move bolt handle to safety notch and press bolt handle into detent to prevent movement.
 - b. Insert the ramrod into the barrel and move it up and down several times to be sure it is reaching down

the full length of the bore. You should hear a metallic sound as the ramrod end makes contact with the breech plug. Make a mark on the ramrod to indicate the point at which it lines up with the muzzle.

c. Remove the ramrod and lay it along the outside of the barrel, aligning the reference mark with the muzzle. If the gun is unloaded, the loading end of the ramrod should be within 1 1/2 inches of the nipple.

d. If the distance between the loading end of the ramrod and the nipple is greater than 1 1/2 inches, the barrel may be either obstructed or loaded. To remove the obstruction, obtain the assistance of an experienced shooter or gunsmith. Do not attempt to clear the barrel by firing.

4. Before loading anything into the barrel, clean all oil and grease from inside the barrel. We suggest a thorough cleaning with WonderLube™ 1000 Plus Bore Cleaning Solvent (see Cleaning and Maintenance section of this manual) or conventional washing with hot, soapy water, followed by lubrication with WonderLube™ 1000 Plus or a suitable non-petroleum-based lubricant. Fire one or two No. 11 percussion caps to clear any residue out of the nipple channel. Point the gun at a leaf, blade of grass or any other lightweight object on the ground. If the object is moved by firing the cap, the barrel is clear and ready for loading.

5. Stand the rifle upright on its buttstock with the muzzle pointed up and away from you. Never work with your face or any part of your body over the muzzle, even when the gun is unloaded. Place the bolt handle in the safety notch. Depress the bolt handle inward, until you hear a click, to further secure it in the non-fire position.

6. Load the powder. Use only black powder or Pyrodex® as explained in the Recommended Load Chart in this manual. Do not overload: it is not safe and will decrease accuracy. Use only a properly calibrated powder measure to measure powder charge and pour powder into the barrel. Tap the rifle's butt pad against the ground several times to ensure that all powder falls to the chamber area of the barrel and ignition channel of the breech plug.

CAUTION: Never load powder directly from any container, flask or powder horn into the barrel, because a spark or ember from a previous firing could ignite the powder entering the barrel and cause the container to explode.

Selecting and Loading the Projectile:

Traditions™ In-Line Rifles offer rifling of either 1:48" twist or 1:32" twist. You may use patched round balls, conical bullets or saboted pistol bullets in Traditions™ In-Line Rifles.

Following is loading information for all projectile types:

 Patched Round Balls: Lubricate a dry cloth patch with WonderLube™ 1000 Plus, an alternate commercial patch lubricant, shortening or saliva (or take advantage of the convenience of pre-lubed WonderLube™ Shooting Patches). Center patch on the muzzle.

CAUTION: Never use any type of plastic patch or sabot with a round ball.

Place the lead ball on top of the patch. If the lead ball has a flat section, or "sprue," place that upward. Using a ball

starter, place the short shaft on top of the ball and drive the ball downward, flush with the muzzle. Use a sharp knife to cut away excess patch material remaining outside the barrel. (This step is unnecessary if you use a pre-cut patch.) Drive the ball deeper into the barrel using the longer shaft of the ball starter. Place the ramrod tip on top of the ball and grasp the rod shaft no more than 8 inches above the muzzle. (Any greater distance could result in breaking of the ramrod and injury to your hand.) Apply moderate pressure and push the ball firmly down on top of the powder. Be sure to seat the patched ball directly on top of the powder charge; any gap between powder and ball can result in excessive pressure upon firing and injury to the rifle, the shooter and bystanders.

- 2. Conical Bullets: Lubricate projectile with WonderLube™ 1000 Plus (or a commercial bullet lubricant or shortening). Place the projectile into the barrel and, using the ball starter and ramrod, follow the procedures as described above. Cloth patches are not to be used with conical bullets. It is very important that the conical bullet be the correct size. It must fit fairly tightly and require moderate pressure to seat on top of the powder. A loose fit could cause the projectile to separate from the powder charge, particularly if the gun is subjected to jarring or sharp movement before firing.
- gun is subjected to jarring or sharp movement before firing.

 3. Saboted Pistol Bullets: The plastic material used in our Traditions™ sabots is self-lubricating, therefore you need not pre-lube. Insert the base of the bullet into the sabot, making certain the bullet is firmly seated against the bottom of the sabot. Place the assembled sabot/bullet into the muzzle. Using the ball starter and ramrod, follow the same procedures as described in the Round Ball section. Again, the sabot/pistol bullet combination must fit tightly and may require moderate pressure to seat firmly on top of the powder. A loose fit may cause the projectile to separate from the powder charge, particularly in the event of jarring or sharp movement before firing.

Marking the Ramrod at Loaded Position:

Now that you have loaded your rifle properly, insert the ramrod into the barrel and mark the point where the ramrod is flush with the muzzle. In the future, this mark will serve to show you at what point the barrel is properly loaded when using the same powder charge and projectile.

Capping and Cocking:

Check to see that the bolt handle is in the safety notch. If not, move it into that position. Hold the muzzle pointed in a safe direction and press a No. 11 percussion cap tightly onto the nipple using a capper. Then, with the gun still pointed in a safe direction, move the bolt handle into the full-cock or "ready-to-fire" position. The rifle is now ready to fire.

If the Gun Fails to Fire

Although failure of a gun to fire at the instant the trigger is pulled (known as delayed ignition or "hangfire") can be a common experience for muzzleloader shooters, and particularly novice shooters, it presents a hazardous situation which requires careful following of the procedures detailed below.

- 1. Should your gun fail to fire, *keep the muzzle pointed at your target for at least one full minute.* By doing so, you make sure you are prepared for the chance of a delayed ignition.
- 2. After this interval, place the bolt handle into the safety

notch position, depress the bolt handle into the safety detent, and remove the percussion cap from the nipple. With the gun pointed in a safe direction, insert a nipple pick, fine wire or pipe cleaner into the hole of the nipple to ensure that the hole is not clogged.

Tap the butt pad of the rifle against the ground to force powder into the ignition channel of the breech plug.

 Place another percussion cap on the nipple and attempt to fire again.

- 5. If proper ignition still does not occur, wait another minute and, with the gun pointed in a safe direction, remove the fired percussion cap and remove the nipple with the small diameter end of the take-down tool or an in-line nipple wrench. Carefully introduce a small amount of powder into the nipple hole. Replace the nipple, tighten with the takedown tool or nipple wrench, and attempt to fire.
- 6. If none of the above works, the charge must be removed from the barrel. (At this point, the beginning shooter should seek the assistance of an experienced shooter with the proper tools.) The safest procedure to accomplish this is as follows (also consult Disassembly section in this manual):
 - With the muzzle pointed in a safe direction, remove the barreled action from the stock.
 - Remove the bolt spring cap, bolt spring, follower, bolt handle, bolt, and breech plug.
 - handle, bolt, and breech plug.
 c. Submerge the receiver and breech end of barrel in approximately one foot of water for 20 minutes.
 - Remove barreled action from water, gently shake the wetted powder charge from breech and dispose of it in a safe manner.
 - e. Insert rammod into the breech end of the barrel and force the patch, if any, and projectile from the barrel.
 - f. Flush and clean the barrel, as described in the Cleaning and Maintenance section of this manual.

Reloading:

After firing, wait at least one minute before reloading to ensure that no spark remains in the barrel. Repeat the loading procedure previously defined above only when you are certain the barrel is free from any sparks or embers.

Sight Adjustment

Your Traditions™ In-Line Rifle is fitted with a click-adjustable rear hunting sight and a fixed-position, beaded blade front sight that are well suited to most hunting and shooting needs.

The rear hunting sight is adjustable by turning the windage screw located on the right side of the sight. Turn the screw clockwise or counter-clockwise to move the point of impact right or left, respectively. The sight assembly is equipped with a ball detent to maintain adjustment during firing.

Elevation may be adjusted by turning the large screw in the center of the sight.

Telescopic Sights:

Traditions™ In-Line Rifles are drilled and tapped for simplified installation of telescopic sights. Consult your dealer or gunsmith, or call the Traditions inc. Customer Service Department for specific recommendations on scope mounting.

Recommended Loads

Rifle	Ball	Patch	Black Powder Charge*				
			Most Accurate		Maximum		
Caliber	Dia.	Thickness	grains	granulations	grains	granulations	
.50	.490"	.015"	50-75	2f	110	2f	
.54	.530"	.015"	55-80	2f	125	2f	

Conical Bullets:							
	Bullet	Bullet	Black Powder Charge*				
Rifle			Most Accurate		Maximum		
Caliber	Caliber	Weight	grains	granulations	grains	granulations	
.50	.50	385 gr.	70-90	2f	100	2f	
.54	.54	425 gr.	80-100	2f	110	2f	

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			Black Powder Charge*			*
Rifle	Sabot	Bullet	Most Accurate		Maximum	
Caliber	Caliber	Caliber	grains	granulations	grains	granulations
.50	.50	.44/.45	75-90	2f	100	2f
.54	.54	.45	80-100	2f	110	2f

^{*}Commercial grade black powder designed for muzzleloaders should be used. The only other propellant which may be used in Traditions" In-Line Rifles is Pyrodex* RS (Rifle and Shotgun Powder), Pyrodex® produces approximately the same results as an equivalent volume (not weight) of black powder. Therefore, the recommended charges apply to Pyrodex⁸ if a powder measure graduated in grains (as most powder measures are) is used. If you weigh your Pyrodex* charge, the recommended charge should be reduced by 20%.

Muzzleloading Accessories

In order to participate fully in the sport, you will probably want to consider the purchase of various accessories mentioned in this manual. Your dealer carries a comprehensive line of accessories from Traditions™. Visit him soon to discover all the ways to make your muzzleloading experience even more enjoyable and convenient, or write to Traditions inc. for a current catalog of firearms and accessories.

Good shooting!

CAUTION: Always wear eye and ear protection when loading and firing.

Limited Lifetime Mechanical Warranty

Traditions inc. will warrant this muzzleloading firearm (or parts if a kit) to be free of mechanical defects in materials or craftsmanship for the life of the firearm, while in the possession of the original owner. Traditions inc. will repair or replace, at its option, product or parts which are returned at owner's expense to the Traditions inc. Customer Service Department. A full explanation of the specific problem must accompany the returned item. Incidental and consequential damages are not covered by this warranty. Wood parts and corrosion damage are not warranted due to the inability of Traditions inc. to control use and storage conditions.

This warranty shall be considered null and void if any of the following are determined by the Traditions inc. Customer Service Department:

- Use of any propellant other than black powder or Pyrodex®
- Use of any powder charges in excess of those recommended in published Traditions inc. shooting instructions.
- 3. Use of any plastic patching material with round balls.
- Modification of internal parts as they were shipped from the factory.

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